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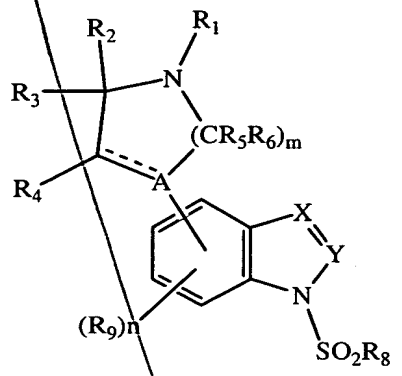
This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A compound of formula I



(I)

wherein

A is ~~C, CR$_{10}$ or~~ N;

X is CR$_{11}$ or N;

Y is CR$_7$ or N with the proviso that when X is N, then Y must be CR$_7$;

R$_1$ is H, C$_1$-C$_6$alkylcarbonyl, C$_1$-C$_6$alkylcarbonyloxy or an C$_1$-C$_6$alkyl, C$_1$-C$_6$alkenyl, C$_1$-C$_6$alkynl or cycloheteroalkyl group each optionally substituted;

R$_2$, R$_3$, R$_4$, R$_5$ and R$_6$ are each independently H, halogen, OH or an optionally substituted C$_1$-C$_6$alkyl group;

R$_7$ and R$_{11}$ are each independently H, halogen or an C$_1$-C$_6$alkyl, aryl, heteroaryl or C$_1$-C$_6$alkoxy group each optionally substituted;

R$_8$ is an C$_1$-C$_6$alkyl, aryl or heteroaryl group each optionally substituted;

R$_9$ is H, halogen or an C$_1$-C$_6$alkyl, C$_1$-C$_6$alkoxy, C$_1$-C$_6$alkenyl, aryl or heteroaryl group each optionally substituted;

R$_{10}$ is H, OH or an optionally substituted C$_1$-C$_6$alkoxy group;

m is an integer of ~~1,~~ 2 ~~or 3~~;

n is 0 or an integer of 1, 2 or 3; and

---- represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

2. (Cancelled)

3. (Original) The compound according to claim 1 wherein R_8 is an optionally substituted phenyl group.

B1 Cont

4. (Original) The compound according to claim 1 wherein R_2, R_3, R_4, R_5 and R_6 are H.

5. (Currently Amended) The compound according to claim ~~2~~ 1 wherein R_1 is H or a C_1-C_6alkyl or cycloheteroalkyl group each optionally substituted.

A2

6. (Original) The compound according to claim 5 selected from the group consisting of:

1-(phenylsulfonyl)-4-piperazin-1-yl-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(3,4-dimethoxyphenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(5-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(4-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(5-bromothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(4,5-dichlorothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

methyl 4-[(4-piperazin-1-yl-1H-indol-1-yl)sulfonyl]phenyl ether;

4-piperazin-1-yl-1-{[4-(trifluoromethoxy)phenyl]sulfonyl}-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-(phenylsulfonyl)-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-[(2-bromophenyl)sulfonyl]-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-[(3,4-dimethoxyphenyl)sulfonyl]-1H-indole;

4-[4-(3-methoxybenzyl)piperazin-1-yl]-1-(phenylsulfonyl)-1H-indole;

1-(phenylsulfonyl)-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;

1-(phenylsulfonyl)-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-[4-(3-methoxybenzyl)piperazin-1-yl]-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;

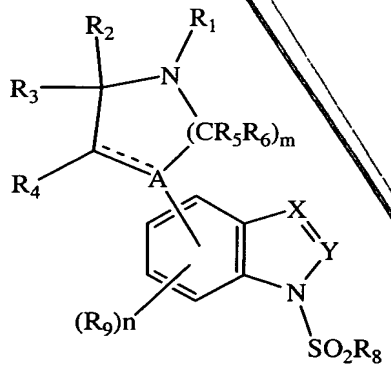
1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;

1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;

1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;

1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;
1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;
1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and
the pharmaceutically acceptable salts thereof.

7. (Currently Amended) A method for the treatment of a disorder of the central nervous system related to or affected by the ~~5-HT6~~ receptor wherein said disorder is selected from the group consisting essentially of: schizophrenia; depression; and a cognitive disorder in a patient in need thereof which comprises administering to said patient a therapeutically effective amount of a compound of formula I.



(I)

wherein

A is ~~C, CR10 or~~ N;

X is CR_{11} or N;

Y is CR_7 or N with the proviso that when X is N, then Y must be CR_7;

R_1 is H, C_1-C_6alkylcarbonyl, C_1-C_6alkylcarbonyloxy or an C_1-C_6alkyl, C_1-C_6alkenyl, C_1-C_6alkynl or cycloheteroalkyl group each optionally substituted;

R_2, R_3, R_4, R_5 and R_6 are each independently H, halogen, OH or an optionally substituted C_1-C_6alkyl group;

R_7 and R_{11} are each independently H, halogen or an C_1-C_6alkyl, aryl, heteroaryl or C_1-C_6alkoxy group each optionally substituted;

R_8 is an C_1-C_6alkyl, aryl or heteroaryl group each optionally substituted;

R_9 is H, halogen or an C_1-C_6alkyl, C_1-C_6alkoxy, C_1-C_6alkenyl, aryl or heteroaryl group each optionally substituted;

R_{10} is H, OH or an optionally substituted C_1-C_6alkoxy group;

m is an integer of ~~1,~~ 2 ~~or 3~~;

n is 0 or an integer of 1, 2 or 3; and

---- represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

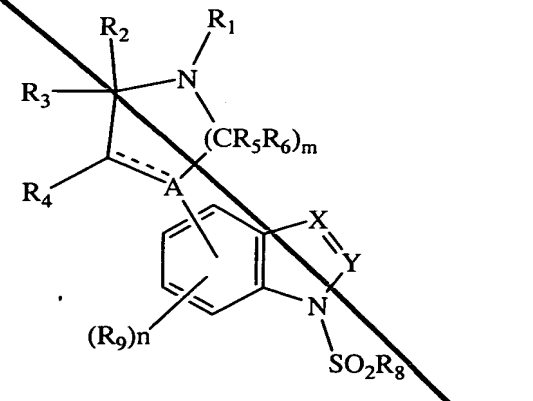
8. (Cancelled)

9. (Original) The method according to claim 7 wherein said disorder is schizophrenia or depression.

10. (Currently Amended) The method according to claim 7 wherein said cognitive disorder is Alzheimer's disease or Parkinson's disease.

11. (Cancelled)

12. (Currently Amended) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a compound of formula I.



(I)

wherein

A is ~~C, CR_{10} or~~ N;

X is CR_{11} or N;

Y is CR_7 or N with the proviso that when X is N, then Y must be CR_7;

R_1 is H, C_1-C_6alkylcarbonyl, C_1-C_6alkylcarbonyloxy or an C_1-C_6alkyl, C_1-C_6alkenyl, C_1-C_6alkynl or cycloheteroalkyl group each optionally substituted;

R_2, R_3, R_4, R_5 and R_6 are each independently H, halogen, OH or an optionally substituted C_1-C_6alkyl group;

R_7 and R_{11} are each independently H, halogen or an C_1-C_6alkyl, aryl, heteroaryl or C_1-C_6alkoxy group each optionally substituted;

R_8 is an C_1-C_6alkyl, aryl or heteroaryl group each optionally substituted;

R_9 is H, halogen or an C_1-C_6alkyl, C_1-C_6alkoxy, C_1-C_6alkenyl, aryl or heteroaryl group each optionally substituted;

R_{10} is H, OH or an optionally substituted C_1-C_6alkoxy group;

m is an integer of ~~1,~~ 2 ~~or 3~~;

n is O or an integer of 1, 2 or 3; and

---- represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

13. (Cancelled)

14. (Original) The composition according to claim 12 wherein R_8 is an optionally substituted phenyl group.

15. (Original) The composition according to claim 12 wherein R_2, R_3, R_4, R_5 and R_6 are H.

16. (Currently Amended) The composition according to claim ~~13~~ 12 wherein R_1 is H or a C_1-C_6alkyl or cycloheteroalkyl group each optionally substituted.

17. (Original) The composition according to claim 16 having a compound of formula I selected from the group consisting of:

1-(phenylsulfonyl)-4-piperazin-1-yl-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

B1 cont

1-[(3,4-dimethoxyphenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(5-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(4-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(5-bromothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(4,5-dichlorothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

methyl 4-[(4-piperazin-1-yl-1H-indol-1-yl)sulfonyl]phenyl ether;

4-piperazin-1-yl-1-{[4-(trifluoromethoxy)phenyl]sulfonyl}-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-(phenylsulfonyl)-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-[(2-bromophenyl)sulfonyl]-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1H-indole;

4-(4-benzylpiperazin-1-yl)-1-[(3,4-dimethoxyphenyl)sulfonyl]-1H-indole;

A2 4-[4-(3-methoxybenzyl)piperazin-1-yl]-1-(phenylsulfonyl)-1H-indole;

1-(phenylsulfonyl)-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;

1-(phenylsulfonyl)-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-[4-(3-methoxybenzyl)piperazin-1-yl]-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;

1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;

1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;

1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;

1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;

1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;

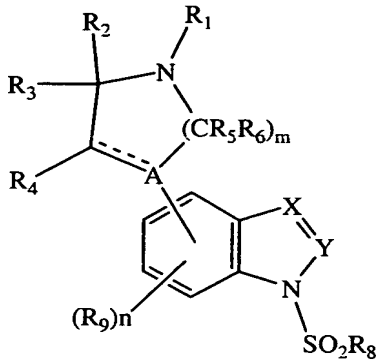
1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;

1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and

the pharmaceutically acceptable salts thereof.

18. (Currently Amended) A method for the preparation of a compound of formula I.

B1 cont



(I)

A2

wherein

A is ~~C, CR$_{10}$ or~~ N;

X is CR$_{11}$ or N;

Y is CR$_7$ or N with the proviso that when X is N, then Y must be CR$_7$;

R$_1$ is C$_1$-C$_6$alkylcarbonyl, C$_1$-C$_6$alkylcarbonyloxy or an C$_1$-C$_6$alkyl, C$_1$-C$_6$alkenyl, C$_1$-C$_6$alkynl or cycloheteroalkyl group each optionally substituted;

R$_2$, R$_3$, R$_4$, R$_5$ and R$_6$ are each independently H, halogen, OH or an optionally substituted C$_1$-C$_6$alkyl group;

R$_7$ and R$_{11}$ are each independently H, halogen or an C$_1$-C$_6$alkyl, aryl, heteroaryl or alkoxy group each optionally substituted;

R$_8$ is an C$_1$-C$_6$alkyl, aryl or heteroaryl group each optionally substituted;

R$_9$ is H, halogen or an C$_1$-C$_6$alkyl, C$_1$-C$_6$alkoxy, C$_1$-C$_6$alkenyl, aryl or heteroaryl group each optionally substituted;

R$_{10}$ is H, OH or an optionally substituted C$_1$-C$_6$alkoxy group;

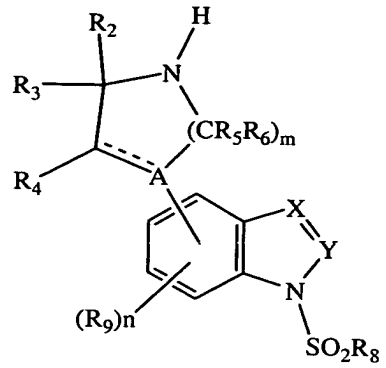
m is an integer of ~~1,~~ 2 ~~or 3~~;

n is 0 or an integer of 1, 2 or 3; and

---- represents a single bond or a double bond

said method which comprises reacting a compound of formula Ia

B' cont

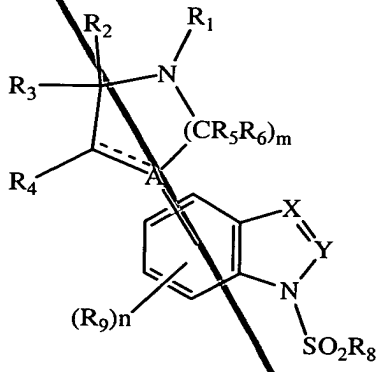


(Ia)

wherein A, X, R_2, R_3, R_4, R_5, R_6, R_7, R_8, R_9, m and n are as defined hereinabove for formula I with a compound R_1-Hal wherein R_1 is as defined hereinabove for formula I and Hal is Cl, Br or I.

A2

19. (New) A compound of formula I



(I)

wherein

A is N;

X is CR_{11} or N;

Y is CR_7 or N with the provisos that when X is N, then Y must be CR_7 and at least one of X and Y must be N;

R_1 is H, C_1-C_6alkylcarbonyl, C_1-C_6alkylcarbonyloxy or an C_1-C_6alkyl, C_1-C_6alkenyl, C_1-C_6alkynl or cycloheteroalkyl group each optionally substituted;

R_2, R_3, R_4, R_5 and R_6 are each independently H, halogen, OH or an optionally substituted C_1-C_6alkyl group;

R_7 and R_{11} are each independently H, halogen or an C_1-C_6alkyl, aryl, heteroaryl or C_1-C_6alkoxy group each optionally substituted;

R_8 is an C_1-C_6alkyl, aryl or heteroaryl group each optionally substituted;

R_9 is H, halogen or an C_1-C_6alkyl, C_1-C_6alkoxy, C_1-C_6alkenyl, aryl or heteroaryl group each optionally substituted;

R_{10} is H, OH or an optionally substituted C_1-C_6alkoxy group;

m is an integer of 2;

n is 0 or an integer of 1, 2 or 3; and

---- represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

B1 cont

20. (New) The compound according to claim 19 wherein R_8 is an optionally substituted phenyl group.

A2

21. (New) The compound according to claim 19 selected from the group consisting of:

1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;

1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;

1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;

1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;

1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;

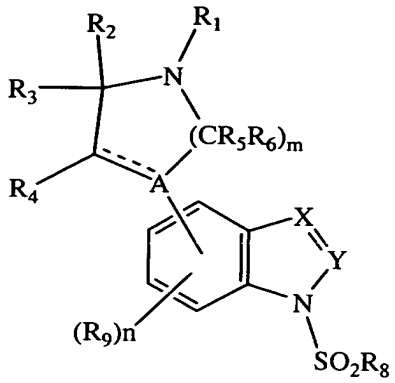
1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;

1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and

the pharmaceutically acceptable salts thereof.

22. (New) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a compound of formula I.

B1 Cont



(I)

wherein

A is N;

X is CR_{11} or N;

Y is CR_7 or N with the provisos that when X is N, then Y must be CR_7 and at least one of X and Y must be N;

A2

R_1 is H, C_1-C_6alkylcarbonyl, C_1-C_6alkylcarbonyloxy or an C_1-C_6alkyl, C_1-C_6alkenyl, C_1-C_6alkynl or cycloheteroalkyl group each optionally substituted;

R_2, R_3, R_4, R_5 and R_6 are each independently H, halogen, OH or an optionally substituted C_1-C_6alkyl group;

R_7 and R_{11} are each independently H, halogen or an C_1-C_6alkyl, aryl, heteroaryl or C_1-C_6alkoxy group each optionally substituted;

R_8 is an C_1-C_6alkyl, aryl or heteroaryl group each optionally substituted;

R_9 is H, halogen or an C_1-C_6alkyl, C_1-C_6alkoxy, C_1-C_6alkenyl, aryl or heteroaryl group each optionally substituted;

R_{10} is H, OH or an optionally substituted C_1-C_6alkoxy group;

m is an integer of 2;

n is O or an integer of 1, 2 or 3; and

---- represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

23. (New) The composition according to claim 22 having a compound of formula I selected from the group consisting of:

1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;

1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;

1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

B' cont

1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

A2 methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;

1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;

1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;

1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;

1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and

the pharmaceutically acceptable salts thereof.